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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/541,902	04/03/2000	Kenji Mori	Q58624	5026

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EXAMINER

NGUYEN, MADELEINE ANH VINH

ART UNIT PAPER NUMBER

2626

DATE MAILED: 02/13/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/541,902

Applicant(s)

MORI, KENJI

Examiner

Madeleine AV Nguyen

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>6, 7</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Objections

1. Claims 2, 10, 14 are objected to because of the following informalities: "it" after convertes should be —them—since an image has a plurality of image data. Appropriate correction is required.

Claim Rejections - 35 USC § 112

2. Claims 1, 8, 11 recite the limitation "said first or second color space" in line 3. There is insufficient antecedent basis for this limitation in the claims.
3. Claims 2, 8, 9, 11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The term "for" before number of colors is vague since question is raised whether it is "for a number of colors" or "four number of colors" (claims 2, 8, 9). The same with claim 11, "at least number of colors" is whether "for a number of colors" or "four number of colors".

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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5. Claims 1-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anabuki et al (US Patent No. 6,441,913) in view of Smith et al (US Patent No. 5,999,710).

Concerning claims 1-14, Anabuki et al discloses an image processor (Figs.1) for printing comprising an expander (4) for expanding supplied compressed image data every color in a first (RGB) or second (YMCK) color space; image data supply means (5, 6) for reading the expanded image data in parallel thereby converting the expanded image data in RGB color space to expanded image data in YMCK color space and not converting the expanded image data in YMCK color space; a print engine (9) for receiving the expanded image data in the YMC color space for printing color image data in YMCK color space (col. 4, lines 4-32; col. 6, line 49 – col. 7, line 38; col. 8, lines 9-24; col. 14, lines 39-46; col. 16, lines 28-38;).

Anabuki et al fails to teach a memory for storing the expanded image data in RGB or YMCK color space. However, it was a matter of well known in the prior art that a memory is included in an expanding device to stored the expanded image data. Smith et al supports that well known in the prior art by teaching a decompressing device (126, 127, Fig.5) having a buffer for storing expanded image data (col. 25, lines 18-30) and a memory (129, Fig.5) for storing the expanded image data before they are sent to the color space converter 125 (col. 28, lines 52-56). It would have been obvious to one skilled in the art at the time the invention was made to include a memory for storing the expanded image data in the expanding portion 4 of the system in Anabuki et al as taught in Smith, since Anabuki also teaches that the expanding portion 4 is for expanding the input image data, if it is compressed, into original image data (col. 4, lines 4-18); thus, Anabuki indirectly teaches that the expanding portion 4 can expand compressed data or stored non-compressed data (original image data).

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Concerning claims 6, Anabuki et al further teaches that the image data in RGB color space includes 4 types of data having the image data of at least red, green and blue and color conversion attribute; and image data in YMCK color space includes four types of data of at least cyan, magenta, yellow and black (col. 8, lines 9-24; col. 9, lines 63-66; col. 11, lines 42-45).

Concerning claims 13-14, Anabuki et al further teaches a compressed image memory (1) provided before the expanding unit for storing compressed image data in RGB color space; the print engine is for printing image data of plural colors (col. 8, lines 9-24; col. 9, lines 63-66; col. 11, lines 42-45).

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. Terashima et al (US Patent No. 6,538,762) discloses a printing system with a printer control only circuit which converts full color RGB raster data into binary CMYK raster data.

b. Ohnishi (US Patent No. 6,067,169) teaches a color image process system which can discriminate the type of input image data and a controller for controlling the output device in accordance with the discrimination.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Madeleine AV Nguyen whose telephone number is 703 305-4860. The examiner can normally be reached on Monday, Tuesday and Thursday from 9:30am to 6:00pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kimberly Williams can be reached on 703 305-4863. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



February 04, 2004

Madeleine AV Nguyen
Primary Examiner
Art Unit 2622